



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,258	07/30/2001	Steve Packwood	06005/36578	2238
4743	7590	11/01/2004	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606			LEFKOWITZ, SUMATI	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,258

Applicant(s)

PACKWOOD ET AL.

Examiner

Sumati Lefkowitz

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-28 is/are allowed.
- 6) ☒ Claim(s) 1,8,13,20-23 and 25 is/are rejected.
- 7) ☒ Claim(s) 2-7,14-19 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-28 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8-13, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Warrior, 5,764,891.

- a. As to claims 1 and 13, Warrior discloses a field device (note abstract, Figures 1 and 2) for use in a process control system having a primary digital data bus (note Figure 2, loop 70 or loop 18), comprising a first communications interface (note Figure 2, FB Interface 30 and 36) communicatively coupled to the primary digital data bus (i.e., wherein the first communications interface, FB Interface 30 and 36 is communicatively coupled to both loop 70 and loop 18, so that either loop 70 or loop 18 can be considered the primary bus), the first communications interface being adapted to process communications having a first protocol (i.e., Field bus), a second communications interface (note Figure 2, Transmitter Interface 34) communicatively coupled to the primary digital data bus (i.e., wherein the second communications interface, Transmitter Interface 34, is communicatively coupled to both loop 70 and loop 18, so that either loop 70 or loop 18 can be considered the primary bus), the second

Art Unit: 2112

communications interface being adapted to process communications having a second protocol (i.e., HART) different from the first protocol, a memory (note Figure 2, memory 48), and a processor (note Figure 2, processors 38 and 66) communicatively coupled to the memory, the first communications interface and the second communications interface, wherein the processor is programmed to process the communications having the first protocol and the communications having the second protocol (note column 3, line 35 - column 5, line 46).

b. As to claims 8 and 20, Warrior discloses that the first protocol is a HART communication protocol and wherein the second protocol is a Fieldbus communication protocol.

c. As to claims 9, Warrior discloses that the first communications interface includes a modem (note Figure 2, modem 68).

d. As to claim 10, Warrior discloses that the first communications interface further includes an amplitude adjustment circuit (note Figure 2, power conversion 72 and column 4, lines 11-17) coupled to an output of the modem.

e. As to claim 11, Warrior discloses that the second communications interface includes a media access unit (note Figure 2, elements 30, 60, 62, 64) and a protocol conversion unit (note Figure 2, element 66) coupled to the media access unit.

f. As to claim 12, Warrior discloses that the memory contains a first software routine for processing the communications having the first communication protocol and a second software routine for processing the communications having the second communication protocol (note column 3, lines 49-51, wherein it is inherent that the memory contains instructions for processing both HART and Field bus signals, since the device interfaces with both types of signals).

Art Unit: 2112

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 21-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warrior, 5,764,891 in view of Applicant's Admitted Prior Art (hereinafter AAPA).

a. As to claim 21, Warrior discloses receiving communications having the second protocol different from the first protocol in the field device via the digital data bus, but fails to disclose using a portable configuration tool proximate to the field device to send the communications having the second protocol.

AAPA discloses the step of using a portable configuration tool proximate to the field device to send the communications having the second protocol (note [0005]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a portable configuration tool proximate to the field device to send the

Art Unit: 2112

communications having the second protocol, as AAPA teaches, in the system of Warrior so as to locally configure the field device, as AAPA teaches in [0005].

b. As to claim 22, AAPA discloses that using the portable configuration tool proximate to the field device to send the communications having the second protocol includes the step of using a HART communicator (note [0005]).

c. As to claim 23, Warrior discloses a field device having a first communications interface (note Figure 2, FB Interface 30 and 36) for processing communications having a first protocol (i.e., Fieldbus protocol) and a second communications interface (note Figure 2, Transmitter Interface 34) for processing communications having a second protocol (i.e., HART protocol), wherein the first communications interface and the second communications interface are operatively coupled to a primary digital data bus (note Figure 2, loop 70 or loop 18, wherein the first communications interface, FB Interface 30 and 36 is operatively coupled to both loop 70 and loop 18 and the second communications interface, Transmitter Interface 34, is operatively coupled to both loop 70 and loop 18, so that either loop 70 or loop 18 can be considered the primary bus).

Warrior fails to disclose a method of locally configuring the field device, the method comprising the steps of communicatively coupling the portable configuration tool to the field device; and sending configuration information from the portable configuration tool to the field device using the second communication protocol.

AAPA discloses a method of locally configuring the field device, the method comprising the steps of communicatively coupling the portable configuration tool to the field device, and

Art Unit: 2112

sending configuration information from the portable configuration tool to the field device using the second communication protocol (i.e., HART protocol) (note [0005]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a portable configuration tool proximate to the field device to send the communications having the second protocol, as AAPA teaches, in the system of Warrior so as to locally configure the field device, as AAPA teaches in [0005].

d. As to claim 25, AAPA discloses that the step of sending configuration information from the portable configuration tool to the field device using the second communication protocol includes the step of using a HART communication protocol to send the configuration information (note [0005]).

Allowable Subject Matter

6. Claims 26-28 are allowed.

7. Claims 2-7, 14-19, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2112

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Lefkowitz whose telephone number is 571-272-3638. The examiner can normally be reached on Monday-Friday from 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached at 571-272-3632.

The fax phone numbers for the organization where this application or proceeding is assigned are:

703-872-9306 for Official communications

571-273-3638 for Non-Official/Draft communications

Art Unit: 2112

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

A handwritten signature in black ink, appearing to read "Sumati Lefkowitz", with a stylized flourish at the end.

Sumati Lefkowitz
Primary Examiner
Art Unit 2112

sl
October 29, 2004